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# CS 255 Business Requirements Document Template

Complete this template by replacing the bracketed text with the relevant information.

This template lays out all the different sections that you need to complete for Project One. Each section has guiding questions to prompt your thinking. These questions are meant to guide your initial responses to each area. You are encouraged to go beyond these questions using what you have learned in your readings. You will need to continually reference the interview transcript as you work to make sure that you are addressing your client’s needs. There is no required length for the final document. Instead, the goal is to complete each section based on your client’s needs.

**Tip:** You should respond in a bulleted list for each section. This will make your thoughts easier to reference when you move into the design phase for Project Two. One starter bullet has been provided for you in each section, but you will need to add more.

## System Components and Design

### Purpose

*What is the purpose of this project? Who is the client and what do they want their system to be able to do?*

* DriverPass is the client with Liam as the owner and Ian as his IT
* System should be a website (preferably cloud) that provides online driving practice tests and the ability to book on-road driving sessions
* All objectives should be completed by deadlines

### System Background

*What does DriverPass want the system to do? What is the problem they want to fix? What are the different components needed for this system?*

* Wants the system to provide adequate driving test training (online classes, practice tests, on-road training (Includes editing packages))
* Would provide customers with better driver training to decrease the rate of failure of driving tests
* Users of the system would include anyone practicing/ training to take a driver's test
* Components Needed:
  + Online/offline access
  + Security
  + Tracking
  + Reservations/appointments
  + Compliance
  + Interface

### Objectives and Goals

*What should this system be able to do when it is completed? What measurable tasks need to be included in the system design to achieve this?*

* Data should be accessible online and able to be downloaded to allowing for updated information offline
* Security: Owner should have access to all accounts (able to reset passwords, block access)
* Tracking: Must track reservations for driving lessons, who canceled, and who modified it
* Has connections to the DMV (receives notifications)
* System design should be similar to the sketch the owner provided
* Should follow product backlog, tasks should be completed by deadlines

## Requirements

### Nonfunctional Requirements

*In this section, you will detail the different nonfunctional requirements for the DriverPass system. You will need to think about the different things that the system needs to function properly.*

#### Performance Requirements

*What environments (web-based, application, etc.) does this system need to run in? How fast should the system run? How often should the system be updated?*

* The system should be a web-based website over a cloud
* The system should run fast to avoid technical problems
* The system should be updated constantly for reasons such as:
  + DMV updates new rules and policies
  + New features are requested to be added to the system
  + To fix/patch bugs

#### Platform Constraints

*What platforms (Windows, Unix, etc.) should the system run on? Does the back end require any tools, such as a database, to support this application?*

* Linux should be used as it is the most secure and reliable platform compared to other operating systems
* The backend should not require any tools (backup and security will be handled through the cloud)

#### Accuracy and Precision

*How will you distinguish between different users?* *Is the input case-sensitive? When should the system inform the admin of a problem?*

* Users will create a username and password linked to their unique email address, no username and email will be the same
* Input for passwords will be case sensitive for increased security
* The system should inform admins of
  + Users who forgot username/password and need assistance accessing their account
  + Any bugs/glitches
  + The system is down
  + Possible attacks

#### Adaptability

*Can you make changes to the user (add/remove/modify) without changing code? How will the system adapt to platform updates? What type of access does the IT admin need?*

* User should be able to make modifications to their own account as well as IT accessing all accounts, without changing the code
* The system should quickly adapt to an to allow users to access the newly updated system update as soon as the update is complete
* The IT admin will “need to have full access over all accounts so ‘he’ can reset them if someone forgets their password, or if ‘they’ let go of someone and ‘he’ needs to be able to block their access.”

#### Security

*What is required for the user to log in? How can you secure the connection or the data exchange between the client and the server? What should happen to the account if there is a “brute force” hacking attempt? What happens if the user forgets their password?*

* A username and password are required to login. They should be linked to an email for account recovery and 2-step authentication can be used for added security
* The cloud will be responsible for securing the connection or the data exchange between the client/server
* If there is a hacking attempt, the account should be disabled, and the system should inform the admins immediately
* If a user forgets their password, they should be able to enter their email to have a link sent to their email that will allow them to create a new password.

### Functional Requirements

*Using the information from the scenario, think about the different functions the system needs to provide. Each of your bullets should start with “The system shall . . .” For example, one functional requirement might be, “The system shall validate user credentials when logging in.”*

* The system shall validate user credentials when logging in
* The system shall accept and store user personal information (first and last name, address, phone number etc.) securely
* The system shall give the owner full access over accounts
* The system shall allow IT to access all accounts to make modifications as needed
* The system shall allow users to make appointments/reservations, cancel, and modify them
* The system shall provide adequate driving test training (online classes, practice tests, on-road training (Includes editing packages))
* The system shall offer three different driving packages
* The system shall identify the driver the customer is scheduled to go out with

### User Interface

*What are the needs of the interface? Who are the different users for this interface? What will each user need to be able to do through the interface? How will the user interact with the interface (mobile, browser, etc.)?*

* The most essential requirements of the user interface include:
  + Security (prevention against unauthorized access)
  + Convenience
  + Efficiency (user interaction and speed)
  + Updates/extensible
  + Performs and handles all tasks
* The different users will be:
  + Students – able to take online driving classes/practice tests and schedule on-the-road training
  + IT – modify user accounts
  + Owner – Access all data and download reports
* The user should be able to access the interface on any device with a web browser

### Assumptions

*What things were not specifically addressed in your design above? What assumptions are you making in your design about the users or the technology they have?*

* We are assuming the design will be within the budget since one was not specified
* Users will know how to interact with the interface
* All students studying for their driver tests will have easy access to the system
* The system will make students pass their driver’s test

### Limitations

*Any system you build will naturally have limitations. What limitations do you see in your system design? What limitations do you have as far as resources, time, budget, or technology?*

* We have a little bit over 4 months to deliver the product
* A budget was not provided, this may cause discrepancies
* More team members would be helpful, work could be produced quicker and would account for employees’ vacations/absences

### Gantt Chart

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